

# Chapter 7: Operations & Maintenance

The work that is completed routinely – daily, weekly, monthly, or annually - often defines the quality of a park system. This chapter will describe the work programs that contribute to the achievement of comprehensive park maintenance.



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## Chapter 7: Operations & Maintenance

### 7.0 Introduction

Park maintenance activities begin when a park or facility becomes the responsibility of the City of Redmond either through purchase or construction completion. Strategic, regular maintenance insures on-going quality and longevity of the park. The ability to provide successful maintenance is positively supported by: well-designed facilities; the use of high-quality materials; established maintenance practices; an adequately funded capital project renovation and replacement program; and trained, dedicated, professional maintenance staff.

Professional maintenance practices are a key factor in the long-term success of department-wide goals for maintaining high quality parks for customer satisfaction in recreation programs and general drop-in use of parks and trails. In addition, maintenance and operations practices fulfill goals related to resource protection through tree and landscape planting and maintenance and invasive weed removal. Park maintenance encompasses many areas including landscape, buildings, small repairs, water management, urban forestry, and sports fields.

It is often maintenance practices that define the quality of a park system. Maintenance not only determines the outward appearance and supports the daily use of parks, but also contributes to the longevity of facilities, the ability of plant materials to successfully mature, and consistent user experiences.

Park Operations employs full-time staff trained and educated in natural resources, recreation, land management, construction methods, cultural resources, and ecology, who, along with seasonal staff members and contractors with technical expertise, complete maintenance activities to support park use.

#### 7.0.1 Program Descriptions

##### Turf Maintenance

This program encompasses best management practices in an effort to maintain healthy conditions of natural turf to support a variety of recreational activities and create a clean community aesthetic. The frequency of the maintenance activities vary, and is dependent on the intensity of use on any specific site. Activities of the Turf Maintenance program include: mowing, edging, trimming, sweeping, turf repairs, amending and fertilizing, and renovation practices such as over seeding, aeration, de-thatching, sodding, and top dressing.

##### Facilities Support

This work program provides for the routine maintenance of restrooms, shelters, sport courts, and park furnishings. Activities include: cleaning and stocking of restrooms, trash removal, cleaning



*Above: Turf Maintenance, Hartman Park*

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and preparing picnic shelters, cleaning and preparing cabins, maintaining barbecues, graffiti removal, pressure washing, blowing hard surfaces such as pathways and plazas, and maintaining sport court markings and nets.

### Urban Forestry

This program is responsible for designated street trees, park trees, and forested parklands. The department installs, prunes, waters, and maintains trees throughout the city. Forested parklands are incorporated into the Green Redmond Partnership, which uses volunteers to support the active management of urban forests through the removal of invasive plants and planting native trees and shrubs. Staff supports this program by providing ongoing training, guidance, and support. In addition, staff coordinate with the Planning and Development Services Department to review street tree plans for public and private developments.

### Trail Maintenance

Forty of the 50 miles of trails in Redmond are maintained for access, safety, and enjoyment. Maintenance activities include: brush control, surfacing additions, signage, bridge maintenance, hazard tree mitigation, trail construction, and maintenance of culverts or other water flow devices.

### Horticulture

The maintenance of ornamental landscapes in parks and other municipal buildings includes activities such as: designing, installing, pruning, mulching, watering, caring for annual and perennial plantings, fertilizing, soil testing, and adding soil amendments.

### Facilities Repair

This program is responsible for repairs to structures, infrastructure, and other park facilities. This work may include electrical, plumbing, construction, concrete, or fencing repairs. Installation of park furnishings such as benches, tables, and drinking fountains is completed by this work group, as well as small-scale facility renovation projects. Some of this work entails the restoration of historic properties including old farmsteads, picnic shelters, and other structures.



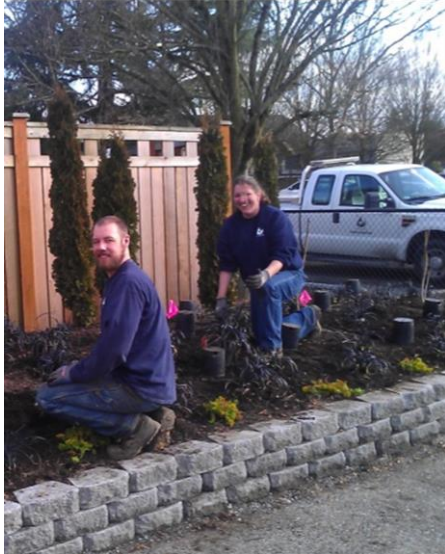
*Graffiti Removal The Edge Skate Park*



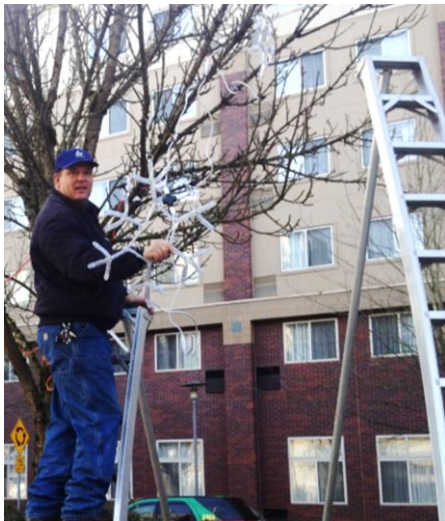
*Tree Maintenance by Park Staff*



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*Right of Way Landscape Planting*



*Redmond Lights, Municipal Campus*



*Irrigation Repair*

### Water Management

The maintenance and management of the irrigation systems in parks, rights-of-way landscapes, and municipal buildings is completed by this work program. Irrigation supports plant life and is more efficient with water and labor than hand watering. Responsibilities include: activating the irrigation systems in spring, programming troubleshooting, maintaining and repairing, and winterizing the systems. The installation of small system additions and/or small drainage projects is also completed by this work group.

### Preventative Maintenance

This program area covers a wide range of maintenance and small repair tasks with the goal of maintaining facilities to achieve their optimum useful life. Maintenance activities include: cleaning roofs and roof gutters, stenciling of parking areas and painting curbs, maintenance of drinking fountains and water features, building and security lighting, maintenance and repair to park furnishings, fencing, playground maintenance and monthly safety inspections, and small repairs or park improvement projects.

### Community Park Management

The maintenance activities in community parks are conducted in support of programmed recreation activities, sports leagues, picnics, and drop-in use. The care and maintenance of natural turf and synthetic athletic fields, tennis courts, basketball and pickle ball courts, play grounds, picnic shelters, restrooms, pathways, parking areas, trails, and landscaped areas are all performed by Park staff. Staff members work closely with Recreation programming staff and user groups to facilitate a positive experience for park users.

### Events and Arts Support

Park Operations Division supports a wide range of Parks and Recreation programs, art and community events, and other citywide events. Activities range from participating in event planning, delivering supplies and materials, supporting event set-up, constructing custom displays, coordinating electrical support, and responding to emerging issues.

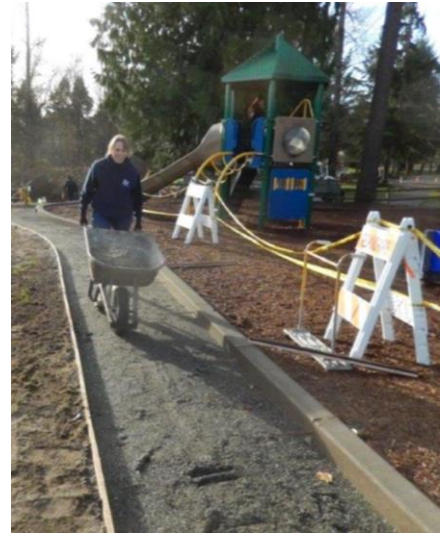
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### Contract Administration

The coordination of on-going contracts (landscape maintenance of rights-of-way areas, security, and pest control) as well as developing and administering the contracted services to complete small park improvements or large-scale maintenance activities are included in this area. Examples of projects include: fencing renovations, synthetic turf replacement, lighting upgrades, asphalt overlays, building renovation and restoration, and cultural resources coordination. The department also coordinates with the City's Historic Preservation Officer for the protection and restoration of historic structures.

### Park Improvement Projects

Small-scale improvements are designed to improve safety; decrease maintenance requirements; and enhance the customer experience. These projects are continuously identified, prioritized, and completed. Examples of past projects are: landscape renovations; the installation of concrete walkways to areas of high pedestrian activity; installation of barbecues, picnic tables, and benches; installation of play equipment; and trail development.



*Playground upgrades*

## 7.1 Goals

Park maintenance is essential to maintaining a welcoming and user-friendly park and trail system. Community members provided direction to staff as part of the PARCC Plan visioning process during public meetings, focus groups, and surveys. The following is a summary of their ideas:

In a citywide statistically valid survey, maintenance of parks was a high priority. When asked to define a quality park, respondents stated the top three characteristics of a quality park are:

1. Cleanliness – 99%
2. Lots of plants and trees – 91%
3. Modern and in good repair – 87%

87%

Value facilities  
that are modern  
and kept in good  
repair

99%

Value clean parks  
and trails

91%

Value parks with  
trees and plants

78%

Value parks with  
grassy open areas

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### 7.2 Inventory

The Park Operations Division provides maintenance and operations services to all parks, trails, and many recreation facilities. The only exceptions are the four recreation buildings (Old Redmond Schoolhouse Community Center, Old Fire House Teen Center, Redmond Senior Center and Redmond Pool at Hartman Park), which are maintained by the Public Works Facilities Division.

The department also maintains more than 2,000 street trees and many landscaped street right of ways. These improvements create a welcoming aesthetic within the city. Trees provide many environmental and health benefits. Landscaped right of ways help control traffic and provide more beautiful entryways into the city. The following exhibits show the inventory of those assets.

### 7.3 Need & Demand

Maintenance of the parks system is essential for the City to:

- Be accountable to the community in preserving the value of our parks and recreation assets,
- Ensure the community's continued safe access to those amenities,
- Provide proactive maintenance that prevents replacement of or loss of park assets at a much higher cost and impact,
- Maintain the quality of life in Redmond

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## 7.4 Level of Service

The City of Redmond supports a consistent focus on core park maintenance activities to:

- Provide great customer service;
- Maintain aesthetic appeal
- Preserve park safety.

The department aims to provide proactive management and maintenance of parks, providing timely response to emerging issues such as graffiti, broken facilities, downed trees, or failing utilities. All park assets (buildings, infrastructure, and amenities) are proactively managed to provide longevity. In addition, the City maintains safe parks by routinely assessing the conditions of and addressing needed maintenance or repairs to playground areas, hard surfaces, trees, sports fields, furniture, and park structures.

Maintenance frequencies and levels of service are defined for the individual maintenance activities within each work program. Levels of service for routine maintenance activities are influenced by such things as park use, resources available, and park quality. For example, more resources are directed toward Grass Lawn Park, which is one of the busiest and most popular parks in the system, and fewer resources are allocated to address maintenance needs at undeveloped, less heavily used, or non-irrigated parks. The defined levels of service for routine maintenance activities are listed below with an example of each.

**Exhibit 7.1: Maintenance Level of Service Approach**

None	Reactive	Managed	Proactive	Comprehensive
<ul style="list-style-type: none"><li>• Service is not provided</li></ul>	<ul style="list-style-type: none"><li>• Service issues are addressed only as they arise (e.g.; graffiti removal)</li></ul>	<ul style="list-style-type: none"><li>• Use of a planned approach to meeting defined service levels (e.g.; mowing)</li></ul>	<ul style="list-style-type: none"><li>• Strategic approach with focus on infrastructure protection and prevention of deterioration, safety, liability, and customer service (e.g.; hard surface repairs)</li></ul>	<ul style="list-style-type: none"><li>• Integrated approach across multiple business lines to best achieve broader City objectives (e.g.; asset management plan).</li></ul>



# 7.5 Implementation

The department will prioritize projects using the following criteria. These criteria are used for general maintenance activities that are prioritized by the Park Operations Supervisors on a weekly basis. In addition, these criteria are used to prioritize small capital maintenance projects for the Parks Capital Investment Program budget prioritization

Small capital maintenance projects are identified and prioritized annually, then scheduled for completion during the winter months. Small capital projects are more than \$25,000 to approximately \$500,000, depending on the complexity of the permitting, inspection, and project management. These projects are prioritized with a 1-3 ranking using the following criteria.

**Exhibit 7.2: Prioritization of Small Capital Maintenance Projects**

Safety and liability	• Does the project address a safety or liability concern?
Asset Preservation	• Will the project provide protection and longevity to the asset?
Increased Efficiencies	• Will the project result in an increase in efficiencies for staff?
Customer Service	• Does the project provide an improvement to the customer experience?

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The following exhibit shows the small capital maintenance projects prioritized using the above criteria.

***Exhibit 7.3: Prioritized List of Small Capital Maintenance Projects – Near-term Priority***

Park	Project Name	Project Number
Grass Lawn	Hardscape – Grass Lawn Park Parking Lot	RN 4
Grass Lawn, Hartman, Farrel McWhirter, Cascade View	Hardscape - Pathways and Fencing	RN 5, 6, 7, 8
Anderson	Infrastructure - Adair House Repairs	RN 11
Grass Lawn, Idylwood	Infrastructure - Grasslawn Ph II, Idly Dock	RN ??, 10
Grass Lawn, Ferrel McWhirter	Infrastructure - Grasslawn Shelter, Farrel McWhirter	RN 9, 13,
Hartman	Turf - Hartman Turf Replacement (5&6)	RN 3
Perrigo	Turf - Perrigo Park Turf Replacement	RN 1

The priority projects are proposed in the Parks Capital Improvement Program, which is described further in Chapter 10.

***Exhibit 7.3: Prioritized List of Small Capital Maintenance Projects – Near-term Priority***

Project Name	Project Number
Anderson Park Adair House Repairs	11
Cascade View Pathways & Fencing	6
Farrel-McWhirter Fencing & Arena Surfacing	14
Farrel-McWhirter Pathways & Fencing	8
Grass Lawn Parking Lot	4
Grass Lawn Pathways & Fencing	5
Grass Lawn Picnic Shelter Ph 1	9
Grass Lawn Picnic Shelter Ph 2	13
Hartman Fields 5 & 6 Synthetic Turf Replacement	3
Hartman Pathways & Fencing	7
Idylwood Dock	10
Perrigo Park Synthetic Turf Replacement	1
Smith Woods Geotechnical & Stream Restoration	2

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### ***Exhibit 7.3: Prioritized List of Small Capital Maintenance Projects – Mid to Long-term Priority***

Project Name	Project Number
Anderson Park Adair House Restroom & Roof	19
Anderson Park Adair Kitchen Restroom	26
Anderson Restroom Renovation	31
Avondale Rd Medians Landscape Renovation	53
Cascade View Irrigation North Field	47
Cascade View Path & Trail Repairs	22
Cascade View Replace Playground and ADA	37
Farrel-McWhirter Caretakers House Kitchen	45
Farrel-McWhirter Fencing & Arena Surfacing	16
Farrel-McWhirter Parking Lot Lighting	33
Farrel-McWhirter Path & Trail Repairs	24
Farrel-McWhirter Replace Hutcheson Shelter	32
Farrel-McWhirter Replace Mackey Creek Playground	38
Farrel-McWhirter Replace Mackey Creek Shelter	34
Farrel-McWhirter Replace Windows	36
Grass Lawn Basketball Lighting	48
Grass Lawn Dome Picnic Shelter Repair	15
Grass Lawn Dome Roof Replacement	25
Grass Lawn Parking Lot Renovation	27
Grass Lawn Path & Trail Repairs	21
Grass Lawn Tennis Light Fixture Replacement	35
Hartman Building Exterior Renovations	30
Hartman Field 1 Retaining Wall	46
Hartman Fields 5 & 6 Perimeter Fence	18
Hartman Fields 5 & 6 Perimeter Path	17
Hartman Irrigation around Fields 5 & 6	50
Hartman Irrigation on 104th	49
Hartman Large Baseball Warning Track	42
Hartman Little League 1, 2, 3 Warning Track	43
Hartman Lower Shop Interior Renovations	44
Hartman Path & Trail Repairs	23
Hartman Renovate Playground	39
Idylwood Beach Bulkhead & Seating Wall	51
Idylwood Dock Repairs	20
Idylwood Dock Replacement Expansion	40
Idylwood North Meadow Renovation	54

*Continued next page*

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### ***Exhibit 7.3: Prioritized List of Small Capital Maintenance Projects – Mid to Long-term Priority (Continued)***

Project Name	Project Number
Idylwood Parking Lot Renovation	29
Idylwood Replace Restroom	41
Meadow Park Sport Court Renovation	28
Perrigo Basketball Lighting	52

# Appendix 7 A: Policies

The following is a compilation of policies from all elements of the City Comprehensive Plan that are related to the operations and maintenance of park and recreation facilities. Policies are arranged by the element name under which they appear in the Comprehensive Plan.

### Goals, Vision and Framework Policies

- FW-6. Protect, enhance and restore habitat and natural ecosystems to levels of function that provide resilience and adaptability, prevent natural hazards, and support biological imperatives for clean water and air.
- FW-11 Emphasize Redmond's role as an environmental steward by conducting City business in a manner that:
- Increases community understanding of the natural environment through education and involvement programs to promote active participation in addressing environmental challenges and solutions;
  - Promotes sustainable land use patterns and low-impact development practices; and
  - Leads by example in the conservation of natural resources, such as energy, water and trees, and avoidance of adverse environmental impacts.
- FW-29 Maintain and promote a vibrant system of parks and trails that are sustainably designed, preserve various types of habitat and protect the natural beauty of Redmond.
- FW-31 Plan, finance, build, rehabilitate and maintain capital facilities and services consistent with the following principles:
- Provide facilities and services that support the City's vision and Land Use Plan as articulated in the Redmond Comprehensive Plan;
  - Ensure that capital facilities are sustainable, well designed, attractive and safe;
  - Provide facilities and services that protect public health and safety;
  - Ensure adequate provision of needed infrastructure and services;
  - Allocate infrastructure funding responsibilities fairly;
  - Optimize strategic actions and investments over near-, mid-, and longterm portions of the Comprehensive Plan's 2030 planning horizon while recognizing the need to retain flexibility to leverage opportunities and respond to changing conditions; and
  - Provide reasonable certainty that needed facility and service improvements are completed in a timely manner.

### Community Character and Historic Preservation Policies

- CC-14 Identify public view corridors unique to Redmond, such as those of Mount Rainier, Mount Baker, the Sammamish Valley, Lake Sammamish, the Sammamish River, the Cascade Mountains; and,



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when feasible, design streets, trails, parks and structures to preserve and enhance those view corridors through such means as:

- Site and landscape planning and design to preserve views,
- Removal of invasive plants,
- Properly pruning trees and shrubs while including them as a part of the vista,
- Framing views with structural elements, and
- Aligning paths to create focal points.

CC-22 Foster care for the natural environment and maintain the green character of the city, while allowing for urbanization through techniques such as:

- Encouraging design that minimizes impact on natural systems;
- Using innovations in public projects that improve natural systems;
- Preserving key areas of open space; and
- Requiring the installation and maintenance of street vegetation as defined by the

### Natural Environment Policies

- NE-3 Conduct City operations in a manner that provides quality municipal services to the community while encouraging resource conservation and minimizing adverse environmental impact.
- NE-8 Support sustainable development and strive towards becoming a sustainable community.
- NE-9 Encourage environmentally friendly construction practices such as Leadership in Energy and Environmental Design (LEED), King County Built Green, and low-impact development.
- NE-19 Avoid, where possible, the creation of new parcels with building sites entirely within wetlands, streams, steep slopes, frequently flooded areas and their associated buffers where possible. Configure future parcels to have a building site outside of these areas.
- NE-71 Preserve and enhance the natural appearance of stream corridors.
- NE-88 Protect salmon, steelhead and other fish, plants and wildlife that rely on the aquatic environment by protecting and improving water quality.
- NE-89 Give special consideration to conservation and protection measures to preserve and enhance anadromous fisheries.
- NE-105 Design City capital improvement projects to preserve trees to the maximum extent possible.
- NE-109 Require street trees along all arterial streets and along local streets designated in neighborhood policies. Where street trees are not practical, consider designating areas through neighborhood policies where trees will be required to be planted on developable lots.
- NE-110 Plant street trees in planter strips or tree wells located between the curb and any sidewalk where feasible. Select tree species and planting techniques to create a unified image for the street,

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provide an effective canopy, avoid sidewalk and utility damage and minimize water consumption. Require deciduous shade trees that are well suited to the climate and to planting along streets and sidewalks.

### Urban Centers; Downtown & Overlake Policies

- DT-24 Implement the recommendations of the adopted Downtown East- West Corridor Study (DEWCS) in order to encourage the creation of a unique, vibrant, and pedestrianfriendly “main street” environment along Cleveland Street that:
- Creates informal outdoor gathering places;
  - Uses streetscape beautification elements, such as street trees, seating areas, pedestrian-scaled street lighting, hanging flower baskets, artwork, and unique signage, to soften and enliven the pedestrian environment;
  - Has strong linkages across the Redmond Central Connector for vehicles, bikes and pedestrians; and
  - Complements the historic character of Old Town.
- OV-25 Promote awareness of the mature cedar tree within Westside Neighborhood Park as a neighborhood landmark or heritage tree. Consider techniques that promote awareness of this tree as a neighborhood asset.

### Parks, Arts, Recreation, Culture and Conservation Policies

- PR-63. Manage and maintain parks and trails through developed Best Management Practices which are guided by the principles of Integrated Pest Management (IPM), Low Impact Development (LID), current conservation principles for energy and water use, asset preservation, cultural resource protection, customer service, and industry safety standards.
- PR-64. Manage assets such as buildings, infrastructure and amenities to provide durability and functionality. Practice proactive management that results in replacement or renovation in advance of need.
- PR-65. Maintain safe parks, trails and facilities by routinely assessing and addressing needed repairs and providing timely response to emerging issues such as damaged or inoperable facilities, failing utilities or downed trees.

# Appendix 7 B: Right of Way Maintenance Areas

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Map 7B.1: Right of Way Maintenance Areas

